

# Work Order ID 68927

Monday, April 25, 2011 1:51:43 PM



Page 1

Item ID: D3954-5

Accept



Setup Start



Revision ID:

Stop



Item Name: Chain Lug

Start Date: 4/25/2011 Start Qty: 4.00



Cust Item ID:

Required Date: 4/29/2011 Req'd Qty: 4.00

Customer:

Reference:

Approvals:

Process Plan:

*Handwritten signature*

Date: 11/04/25 Tooling:

Date:

QC:

Date: SPC (Y/N):

Date:

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D3954	RevB

100

0.00



Mill Conv

Memo

0.00

Conventional Milling Machine

mill to size

*Handwritten: 11/05/25*

*Handwritten: 4*

*Handwritten: 11-5-25*

*Handwritten: 4*

110

0.00



Waterjet

Memo

0.00

FLOW CNC Waterjet

1-Cut as per Dwg D3954

Dwg Rev: *Handwritten: 3*

Prog Rev: *Handwritten: B*

2-Deburr if necessary

*Handwritten: 11-5-25*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 68927**

Monday, April 25, 2011 1:51:44 PM



Page 2

Item ID: D3954-5

Accept



Setup Start



Revision ID:

Stop



Item Name: Chain Lug

Start Date: 4/25/2011 Start Qty: 4.00



Cust Item ID:

Required Date: 4/29/2011 Req'd Qty: 4.00



Customer:

Reference:

Run Start



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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120

QC2- Inspect parts off machine FAI/FAIB

0.00



QC

Memo

0.00

Quality Control

B11-5-25

4

125

0.00



Mill Conv

Memo

0.00

Conventional Milling Machine

Open hole to .75" max and mill as per Dwg

A 11/05/26

4

φ

PTO

130

QC8- Inspect parts - second check

0.00



QC

Memo

0.00

Quality Control

B A 11/05/26

4

φ

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3954-5 PAR #: N/A Fault Category: Use-on-in NCR: Yes ☒ No ☐ DQA: 11 Date: 11/05/26  
 Resolution: Use-on-in Disposition: Scraped QA: N/C Closed: 11/05/26 Date: 11/06/01

NCR: <u>68927</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
11/05/26	125	.75 MAX Hole opened up to .7525 RC: PROCESS	11.05.26 CS1042 CP 11.05.26 CS1042	ACCEPTABLE DEVIATION. Non-airworthy part.	11/05/26	B.A 11/05/26	11.05.26 CS1042 CP	11.05.01 CS1042

NOTE: Date & initial all entries

**Work Order ID 68927**

Page 3

Monday, April 25, 2011 1:51:44 PM

Item ID: D3954-5

Accept



Setup Start



Revision ID:

Stop



Item Name: Chain Lug

Start Date: 4/25/2011 Start Qty: 4.00



Cust Item ID:

Required Date: 4/29/2011 Req'd Qty: 4.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140	Identify as per dwg & Stock Location: <u>97</u>	0.00							
	Packaging								
	Memo	0.00							
	Packaging								
150	QC21- Final Inspection - Work Order Release ✓	0.00							
	QC								
	Memo	0.00							
	Quality Control								

11/5/2650(40)

11/5/30

NF  
11-05-27

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Monday, April 25, 2011 1:51:48 PM

Page 1

Work Order ID: 68927



Parent Item: D3954-5



Parent Item Name: Chain Lug

Start Date: 4/25/2011

Required Date: 4/29/2011

Start Qty: 4.00

Required Qty: 4.00

## Comments:

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M1010B1.000X02.000		Purchased	No			100	f	6.6000	0.5	2.105263			
1010-1025 Steel Bar 1.00 x 2.00													



B11-5-26

### Location

### Loc Qty

### Loc Code

MAT035

6.6

114431

6.6

110368

④

1010 1.00" x 12.00"  
C211105125

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries





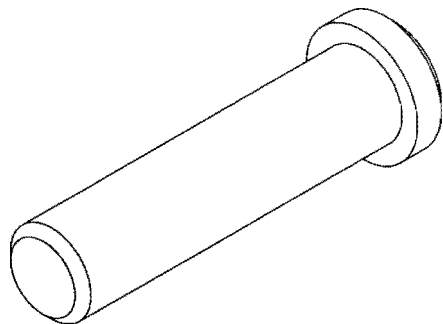
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

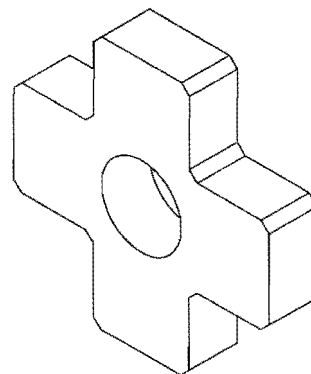
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NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

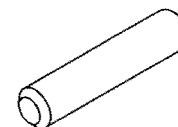
**NOTE:** Date & initial all entries



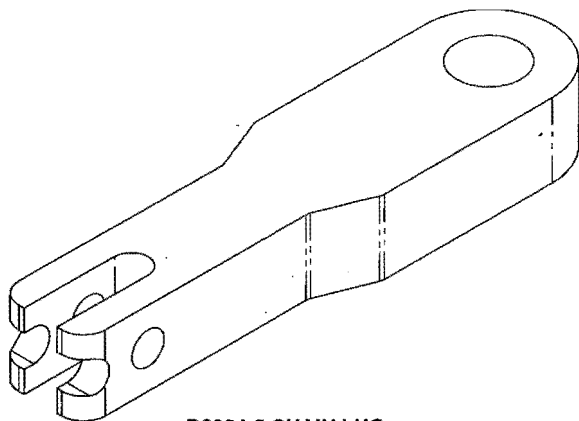
**D3954-1 GWT PIN**



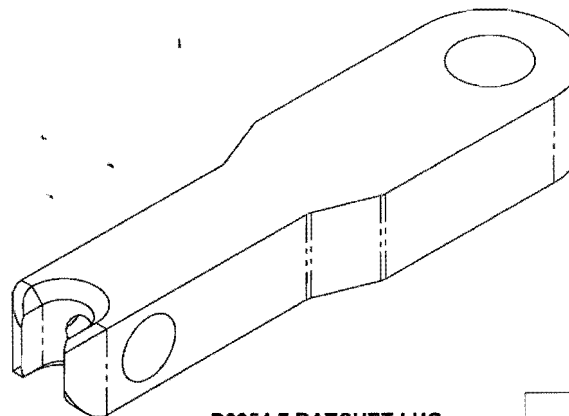
**D3954-3 GWT KNOB**



**D3954-9 GWT CHAIN PIN**



**D3954-5 CHAIN LUG**



**D3954-7 RATCHET LUG**

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 68927

*11-04-25*

**RELEASED**  
2009-10-19

B	MATERIAL UPDATE FOR ALL COMPONENTS WAS STAINLESS STEEL IS CARBON STEEL FOR ALL COMPONENTS. FINISH FOR ALL COMPONENTS WAS RED POWDER COAT IS YELLOW SPRAY PAINT.		AJS	09.10.15
A	NEW ISSUE		AJS	09.05.26
REV.	DESCRIPTION		BY	DATE
DESIGN	AJS/DSTOW	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA DRAWING NO. <b>D3954</b> TITLE <b>MISC MACHINED PARTS GWT KIT</b> SCALE <b>NTS</b> SHEET 1 OF 3 REV. B COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.		
DRAWN	AJS			
CHECKED	<i>[Signature]</i>			
MFG. APPR.	<i>[Signature]</i>			
APPROVED	<i>[Signature]</i>			
DE APPR.	N/A	DATE <b>09.10.15</b>		

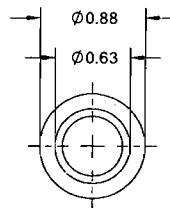
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

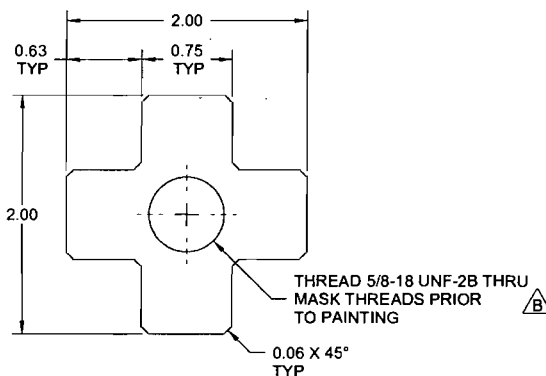
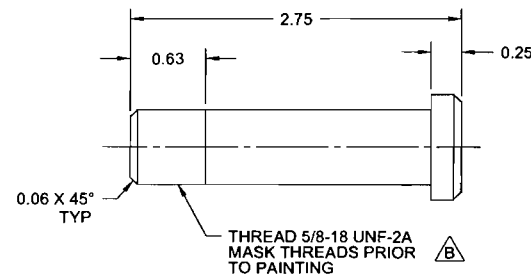
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

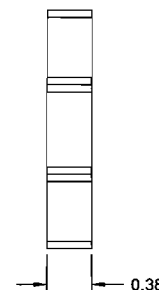
**NOTE:** Date & initial all entries



**D3954-1 GWT PIN**



**D3954-3 GWT KNOB**



*u/o 68927*

**NOTES:**

1) MATERIAL -1: AISI 1010-1025 MILD STEEL ROUND BAR  
PER DART SPEC M1018-R

-3: AISI 1010-1025 MILD STEEL SHEET  
PER DART SPEC MS1010-S

OR: AISI 1010-1025 MILD STEEL BAR  
PER DART SPEC M1010-B

**ALTERNATE MATERIAL:**

-1: AISI 303/304 STAINLESS STEEL ROUND BAR  
REF DART SPEC M303/304R

-3: AISI 303/304 STAINLESS STEEL SHEET  
REF DART SPEC M303/304S

OR: AISI 303/304 STAINLESS STEEL BAR  
REF DART SPEC M303/304B

- 2) FINISH: SPRAY PAINT YELLOW WITH BERTRAND CG1031B PER DART QSI 005 4.2
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3954-X" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT -1: 0.26 lbs  
-3: 0.23 lbs

**RELEASED**  
2009-10-19

DESIGN	AJS/DSTOW	<b>DART AEROSPACE LTD</b>	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D3954	SHEET 2 OF 3
APPROVED		TITLE	SCALE
DE APPR.	N/A	MISC MACHINED PARTS GWT KIT	NTS
DATE	09.10.15	COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	

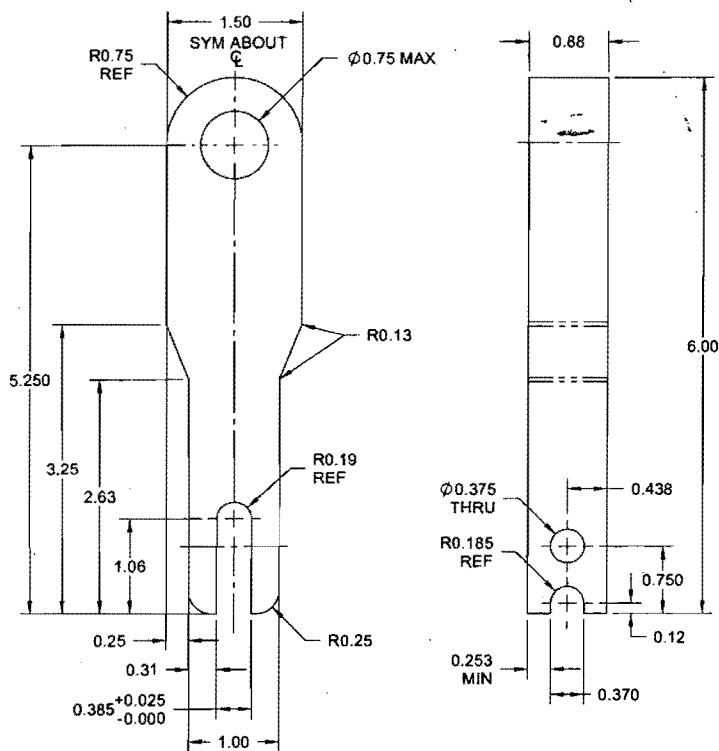
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



**D3954-5 CHAIN LUG**

**NOTES:**

1) MATERIAL: -5/-7: AISI 1010-1025 MILD STEEL BAR  
PER DART SPEC M1010-B

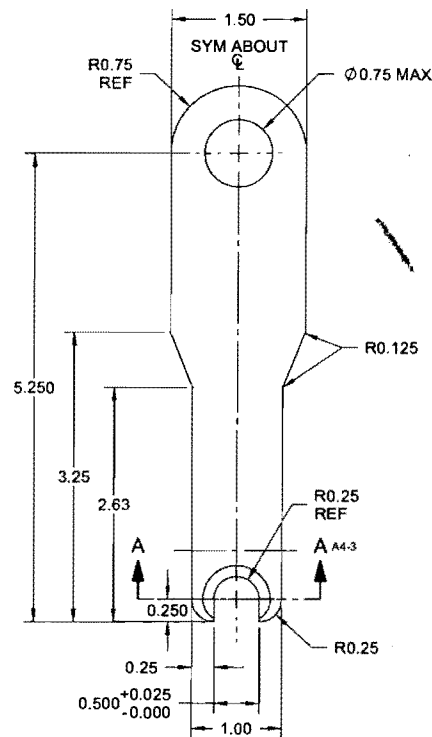
9: AISI 1010-1025 MILD STEEL ROUND BAR  
PER DART SPEC M1018-R

**ALTERNATE MATERIAL:**

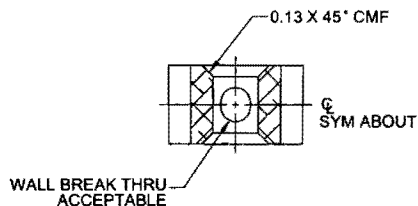
-5/-7: AISI 303/304 STAINLESS STEEL BAR  
REF DART SPEC M303/304B

-9: AISI 303/304 STAINLESS STEEL ROUND BAR  
REF DART SPEC M303/304R

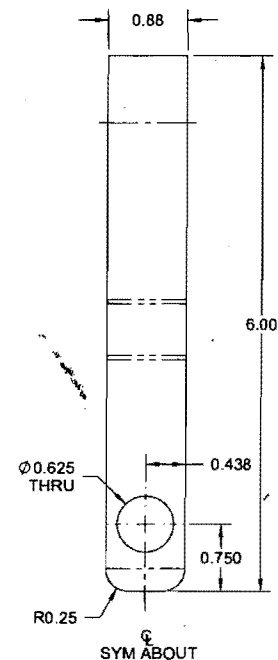
- 2) FINISH -7 ONLY: SPRAY PAINT YELLOW WITH BERTRAND CG1031B PER DART QSI 005 4.2
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3954-X" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT -5/-7: 1.56 lbs EACH  
-9: 0.05 lbs



**D3954-7 RATCHET LUG**



**SECTION A-A C3-3**



**D3954-9 GWT CHAIN PIN**

DESIGN	AJS/DSTOW	<b>DART AEROSPACE LTD</b>	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D3954	SHEET 3 OF 3
APPROVED		TITLE	SCALE
DE APPR.	N/A	MISC MACHINED PARTS GWT KIT	NTS
DATE	09.10.15	COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	

**RELEASED**  
2009-10-19

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries